THE CITY OF LONDON
DENTAL SCHOOL

MSc Degree in the Specialist Practice of Clear Aligner Orthodontics

MSc Degree accredited by

University of Bolton
Teaching Intensive, Research Informed

About the Course

The MSc Specialist Practice of Clear Aligner Orthodontics builds on existing knowledge and teaches the general dental practitioner how to treat complex cases which were once only possible with fixed appliances. You will be amazed at how clear aligner technology has progressed to become a powerful orthodontic treatment modality in its own right, potentially surpassing conventional orthodontics. Fees from £6,500 with bespoke options, discounts and financing options available that will be discussed during our virtual meeting.

Module Outline

Patient Assessment and Risk Management

In order to treat growing children and teenagers predictively and precisely with clear aligners, this module will explain the essentials of growth and development of the cranio-facial structures, as this is the foundation of understanding the development of malocclusions and the aims of clear aligner treatment. This module will also teach how to analyse a malocclusion in its ongoing development using different diagnostic procedures such as cephalometric analysis. On completing this module, you will be able to understand and to address the orthodontic malocclusion in growing patients.

Reflective Clinical Practice of Clear Aligner Orthodontics

This comprehensive module will teach basic to advanced and complicated biomechanics of tooth movement. It instils an understanding of the structure of treatment plan assembly of complex malocclusions. The aim is to build your knowledge and confidence in treating difficult cases with an understanding of mechanics and protocols. It includes additional topics covering attachment selection, attachment design and their precise positioning. Anchorage will be defined specifically in regard to clear aligner treatment and how achieved for predictable and successful outcomes. You will also learn how and when to use accessories and TADs, which increase the predictability, accuracy and range of clear aligner treatment possibilities. The overriding purpose of this module is to develop your confidence in treating complex cases with clear aligners and expand your horizons.

Reflective Professional Log

This module encourages you to critically reflect on your professional, clinical and managerial practice in a specific field in order to explore questions which are fundamental to your professional development and eventual dissertation topic. The module requires you to evaluate your own knowledge base and to recognise and clarify the important connections between what you already know and what you intend to learn. It encourages information literacy, using contemporary and seminal sources in order to compile a critical evaluation of specialist practice to allow you to develop strategies to enhance your professional development in the specialist practice of clear aligner orthodontics.

Understanding Research and Critical Appraisal (URECA)

The aim of this module is to help you to develop research skills in order to identify your dissertation topic in the specialist practice of clear aligner orthodontics, make a detailed proposal and plan your research. It will develop the academic skills necessary for your study at Masters level. This comprehensive module covers clinical statistics, evidence-based practice, critical appraisal, measurement and research design, and explores their specific application in medical research and treatment.

You will learn how to formulate realistic research objectives and an appropriate conceptual/analytical framework for your research. You will also learn how to identify, collate and critically review relevant evidence from the literature, and how to make informed decisions about which research philosophies, strategies and methods are applicable to your research.
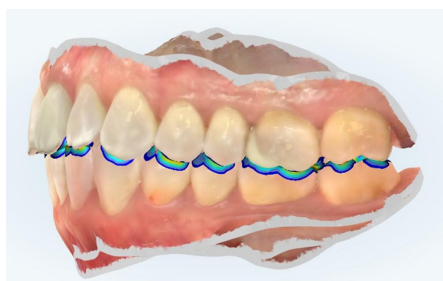
Three Dimensional Digital Imaging Techniques, Interpretation and Technology

This module will use actual cases to demonstrate step by step how to assess and predictably treat malocclusions with clear aligners in the first and second eruption phases of the permanent dentition of adolescents. It emphasises the differences of approach in treating children and teenagers efficiently. As a part of interceptive orthodontic treatment in growing children, this module explains the design concepts, methodology and clinical applicants of advanced 3D printed devices as well as clear aligners to expand your treatment options. Students will develop an appreciation and deeper understanding essential in formulating effective treatment plans fundamental to consistent treatment outcome and aesthetics. Treating children under 10 years of age will not only grow your practice and referrals significantly but it will also make phase 2 treatments less challenging and more predictable.

Occlusal Diagnosis and Analysis

Patient aesthetic awareness coupled with the development of new orthodontic techniques, Implant and restorative rehabilitation have increased the number of adults seeking advanced dental treatment.

This has increased the likelihood of dentists having to diagnose and treat the occlusion as part of a larger treatment plan.

This multidisciplinary module considers the anatomy, aetiology and management of occlusion from an orthodontic and restorative perspective.

The aim of this module is to enable the dentist to effectively diagnose and formulate a treatment plan so that the patient can be treated with a comprehensive multidisciplinary approach.

Computer Assisted Design and Fabrication of Restorations

This module will expand on the knowledge and expertise gained from the previous modules by considering the in-depth analysis of advanced cases from assessment to delivery and sequential implementation of treatment plans. An extensive and varying range of malocclusions will be reviewed and their treatment optimal modalities explained in detail entailing the implementation of accessories and TADs.

It also presents the errors that will occur as a result of poor knowledge, understanding and inappropriate application of this powerful treatment modality. Fundamental to avoiding complications is developing competency in this speciality and a profound understanding of how and why these errors occur, their early identification and management. Clinical tips and tricks of clear aligner orthodontics will also be discussed.

Dissertation

This taught module provides an opportunity to undertake an extended and substantial piece of research in the specialist practice of clear aligner orthodontics. It allows you to synthesise the academic knowledge acquired from prior postgraduate and experiential learning to produce an evaluative and critical discussion of a specialist dental topic directly related to your programme of study. It aims to help you to develop your abilities in identifying a problem, establishing its significance, formulating a hypothesis/proposition, designing a means of testing the hypothesis and evaluating the results.